Columbia Analytical Services, Inc.
Cooler Receipt and Preservation Form

Client: Premier Service Request #

Project: FP Wiggins

Cooler received on 9/20/06 and opened on 9/20/06 by TDC

COURIER: CAS UPS FEDEX DHL CLIENT Tracking #

1	Were custody seals on outside of cooler?	Yes	(No)	N/A
2	Were seals intact, signed and dated?	Yes	No	(N/A)
3	Were custody papers properly filled out?	(Yes)	No	N/A
4	Temperature of cooler(s) upon receipt (Should be 4 +/- 2 degrees C) 1.7			
5	Correct Temperature?	(Yes)	No	N/A
6	Were Ice or Ice Packs present	(Yes)	No	N/A
7	Did all bottles arrive in good condition (unbroken, etc....)?	(Yes)	No	N/A
8	Were all bottle labels complete (sample ID, preservation, etc....)?	(Yes)	No	N/A
9	Did all bottle labels and tags agree with custody papers?	(Yes)	No	N/A
10	Were the correct bottles used for the tests indicated?	(Yes)	No	N/A
11	Were all of the preserved bottles received with the appropriate preservative?	(Yes)	No	N/A

HNO3 pH<2 H2SO4 pH<2 ZnAc2/NaOH pH>9 NaOH pH>12 HCl pH<2

Preservative additions noted below

12	Were all samples received within analysis holding times?	(Yes)	No	N/A
13	Were VOA vials checked for absence of air bubbles? If present, note below	Yes	No	(N/A)
14	Where did the bottles originate?	(CAS)	Client	

Sample ID	Reagent	Manuf. Lot # or CAS Chem ID	ml added	Inititials

Additional comments and/or explanation of all discrepancies noted above:

Client approval to run samples if discrepancies noted: Date 13

SR # : J Date: 9/20/06 Initials: TDK

Note that pH is checked and meets the required pH criterion listed in the column heading unless otherwise noted on cooler receipt form.

	Bottle Code																												
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
	40mL	40mL	40mL	40mL	125mL	125mL	125mL	125mL	250mL	250mL	250mL	250mL	250mL	250mL	250mL	500mL	500mL	500mL	1L	1L	1L	1L	1L	2oz	4oz	8oz	16oz	5g	100mL	Misc.
Container	G	G	G	G	P	P	P	P	P	P	P	P	P	G	G	P	P	P	P	P	G	G	G	G	G	G	G	ENC	P	Misc.
Pres.		HCl	Sodium Thiosulfate	H2SO4		HCl	H2SO4	HNO3		H2SO4	HNO3	ZnAcetate NaOH	NaOH		HNO3		H2SO4	HNO3		HNO3		HCl	H2SO4						Sodium Thiosulfate	
Req. pH	N/A	<2	N/A	<2	N/A	<2	<2	<2	N/A	<2	<2	>9	>12	N/A	<2	N/A	<2	<2	N/A	<2	N/A	<2	<2	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sample #	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				-	-
-001																										1				
-002																										1				
-003																										1				
-004																														
-005																														
-006																														
-007																														
-008																														
-009																														
-010																														
-011																														
-012																														
-013																														
-014																														
-015																														
-016																														
-017																														
-018																														
-019																														
-020																														
-021																														
-022																														
-023																														
-024																														
-025																														
-026																														
-027																														
-028																														
-029																														
-030																														
-031																														
-032																														
-033																														
-034																														
-035																														
-036																														
-037																														
-038																														
-039																														
-040																														

Columbia Analytical Services INC.
An Employee - Owned Company
www.caslab.com

CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

8540 Baycenter Rd. • Jacksonville, FL 32256 • (904) 739-2277 • 800-695-7222 x06 • FAX (904) 739-2011

PAGE _____ OF _____

SR # 30004509
CAS Contact

[redacted]

Project Name: IP Wiggins	Project Number: 202008.01
Project Manager: ~~Tom Kissinger~~ Doug Skelly	Email Address: dskelye premiercorp-usa.com
Company/Address: 1880 West Oak Dr Bldg 100 #106 Marietta, GA 30062	
Phone #: 770-973-2100	FAX#: 770-973-7385
Sampler's Signature: E Pollitzer	Sampler's Printed Name: Ernie Pollitzer

ANALYSIS REQUESTED (Include Method Number and Co

PRESERVATIVE

NUMBER OF CONTAINERS

8270 TAL's, Renta

Preservative Key
0. NONE
1. HCL
2. HNO_3
3. H_2SO_4
4. NaOH
5. Zn. Acetate
6. MeOH
7. $NaHSO_4$
8. Other _____

REMARKS/ ALTERNATE DESCRIPTION

CLIENT SAMPLE ID	LAB ID	SAMPLING DATE	SAMPLING TIME	MATRIX	#		
5W		9/19	4:00	S	1	X	
6F		"	4:04	"	1	X	
7W		"	4:12	"	1	X	

SPECIAL INSTRUCTIONS/COMMENTS
RUSH ANALYSIS

See QAPP ☐

TURNAROUND REQUIREMENTS
✓ RUSH (SURCHARGES APPLY)
_____ STANDARD
REQUESTED FAX DATE
_____
REQUESTED REPORT DATE
_____

REPORT REQUIREMENTS
_____ I. Results Only
_____ II. Results + QC Summaries (LCS, DUP, MS/MSD as required)
_____ III. Results + QC and Calibration Summaries
_____ IV. Data Validation Report with Raw Data
_____ V. Speicalized Forms / Custom Report
Edata _____ Yes _____ No

INVOICE INFORMATION
PO#
BILL TO:

SAMPLE RECEIPT: CONDITION/COOLER TEMP: _____ CUSTODY SEALS: Y N

RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY
15					
Signature: E Pollitzer	Signature: Tom Kissinger	Signature	Signature	Signature	Signature
Printed Name: E Pollitzer	Printed Name: Tom Kissinger	Printed Name	Printed Name	Printed Name	Printed Name
Firm: Premier Env	Firm: CAS	Firm	Firm	Firm	Firm
Date/Time: 9/19 6:00PM	Date/Time: 9/20/06 8:05am	Date/Time	Date/Time	Date/Time	Date/Time

Distribution: White - Return to Originator; Yellow - Lab Copy; Pink - Retained by Client

SCOC-01/12/06-07

COLUMBIA ANALYTICAL SERVICES, INC.

Client:	Premier Environmental Services	**Service Request No.:**	J0604558
Project:	IP Wiggins	**Date Received:**	9/22/06
Sample Matrix:	soil		

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of Columbia Analytical Services, Inc. (CAS). This report contains analytical results for samples designated for Tier II data deliverables, including results of QC samples analyzed from this delivery group. When appropriate to the procedure, method blank results have been reported with each analytical test. Analytical procedures performed by the lab are validated in accordance with NELAC standards. Parameters that are included in the NELAC Fields of Testing but are not included in the lab's NELAC accreditation are identified in the discussion of each analytical procedure.

Sample Receipt

4 soil samples were received for analysis at Columbia Analytical Services on 9/22/06. The samples were received in good condition and consistent with the accompanying chain of custody form. Samples are refrigerated at 4±2°C upon receipt at the lab.

PAHs and PCP by GC-MS SIM

No problems were observed with this delivery group.

Approved by Tom D. Hussing **Date** 9/25/06

Data Qualifiers

Inorganic Data

*	The result is an outlier. See case narrative.
#	The control limit criteria are not applicable. See case narrative.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result.
E	The result is an estimated amount because the value exceeded the instrument calibration range.
J	The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
U	The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
Z	Too many colonies were present (TNTC). The numeric value represents the filtration volume.
i	The MRL/MDL has been elevated due to matrix interference.
X	See case narrative.

Metals Data

*	The result is an outlier. See case narrative.
#	The control limit criteria are not applicable. See case narrative.
B	The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
E	The reported value is estimated because of the presence of matrix interference.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The result was determined by Method of Standard Additions (MSA).
U	The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL has been elevated due to matrix interference.
X	See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.

Organic Data

*	The result is an outlier. See case narrative.
#	The control limit criteria are not applicable. See case narrative.
A	The tentatively identified compound is a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result.
C	The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
D	The reported result is from a dilution.
E	The result is an estimated amount because the value exceeded the instrument calibration range.
J	The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
P	The GC or HPLC confirmation criteria were exceeded. The relative percent difference is greater than 40% between the two analytical results (25% for CLP Pesticides)
U	The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
i	The MRL/MDL has been elevated due to a chromatographic interference.
X	See case narrative.

Petroleum Hydrocarbon Specific

F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
Y	The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
Z	The chromatographic fingerprint does not resemble a petroleum product.

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
J0604558-001	8W	09/21/06	13:55
J0604558-002	9F	09/21/06	14:05
J0604558-003	10W	09/21/06	14:15
J0604558-004	11W	09/21/06	14:28

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Premier Environmental Services	**Service Request:**	J0604558
Project:	IP Wiggins/202008.01	**Date Collected:**	09/21/2006
Sample Matrix:	Soil	**Date Received:**	09/22/2006

Semi-Volatile Organic Compounds by GC/MS

Sample Name:	8W	**Units:**	ug/Kg
Lab Code:	J0604558-001	**Basis:**	Dry
Extraction Method:	EPA 3550	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	ND	U	4.0	0.60	1	09/22/06	09/23/06	JWG0602976	
2-Methylnaphthalene	ND	U	4.0	1.8	1	09/22/06	09/23/06	JWG0602976	
1-Methylnaphthalene	ND	U	4.0	1.3	1	09/22/06	09/23/06	JWG0602976	
Acenaphthylene	ND	U	7.9	3.1	1	09/22/06	09/23/06	JWG0602976	
Acenaphthene	ND	U	7.9	3.2	1	09/22/06	09/23/06	JWG0602976	
Fluorene	ND	U	4.0	1.8	1	09/22/06	09/23/06	JWG0602976	
Pentachlorophenol	ND	U	40	0.82	1	09/22/06	09/23/06	JWG0602976	
Phenanthrene	ND	U	7.9	3.9	1	09/22/06	09/23/06	JWG0602976	
Anthracene	ND	U	4.0	0.71	1	09/22/06	09/23/06	JWG0602976	
Fluoranthene	ND	U	4.0	0.69	1	09/22/06	09/23/06	JWG0602976	
Pyrene	ND	U	4.0	0.61	1	09/22/06	09/23/06	JWG0602976	
Chrysene	ND	U	4.0	0.56	1	09/22/06	09/23/06	JWG0602976	
nz(a)anthracene	ND	U	4.0	0.58	1	09/22/06	09/23/06	JWG0602976	
nzo(b)fluoranthene	ND	U	4.0	0.93	1	09/22/06	09/23/06	JWG0602976	
Benzo(k)fluoranthene	ND	U	4.0	0.76	1	09/22/06	09/23/06	JWG0602976	
Benzo(a)pyrene	ND	U	4.0	1.3	1	09/22/06	09/23/06	JWG0602976	
Indeno(1,2,3-cd)pyrene	ND	U	4.0	1.1	1	09/22/06	09/23/06	JWG0602976	
Dibenz(a,h)anthracene	ND	U	4.0	0.60	1	09/22/06	09/23/06	JWG0602976	
Benzo(g,h,i)perylene	ND	U	4.0	0.76	1	09/22/06	09/23/06	JWG0602976	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorobiphenyl	61	30-118	09/23/06	Acceptable
2,4,6-Tribromophenol	77	34-166	09/23/06	Acceptable
p-Terphenyl-d14	73	41-146	09/23/06	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Premier Environmental Services	**Service Request:**	J0604558
Project:	IP Wiggins/202008.01	**Date Collected:**	09/21/2006
Sample Matrix:	Soil	**Date Received:**	09/22/2006

Semi-Volatile Organic Compounds by GC/MS

Sample Name:	9F	**Units:**	ug/Kg
Lab Code:	J0604558-002	**Basis:**	Dry
Extraction Method:	EPA 3550	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	ND	U	4.0	0.59	1	09/22/06	09/23/06	JWG0602976	
2-Methylnaphthalene	ND	U	4.0	1.8	1	09/22/06	09/23/06	JWG0602976	
1-Methylnaphthalene	ND	U	4.0	1.3	1	09/22/06	09/23/06	JWG0602976	
Acenaphthylene	ND	U	7.9	3.1	1	09/22/06	09/23/06	JWG0602976	
Acenaphthene	ND	U	7.9	3.2	1	09/22/06	09/23/06	JWG0602976	
Fluorene	ND	U	4.0	1.8	1	09/22/06	09/23/06	JWG0602976	
Pentachlorophenol	**3300**	D	400	8.1	10	09/22/06	09/25/06	JWG0602976	
Phenanthrene	ND	U	7.9	3.9	1	09/22/06	09/23/06	JWG0602976	
Anthracene	ND	U	4.0	0.71	1	09/22/06	09/23/06	JWG0602976	
Fluoranthene	ND	U	4.0	0.69	1	09/22/06	09/23/06	JWG0602976	
Pyrene	ND	U	4.0	0.61	1	09/22/06	09/23/06	JWG0602976	
Chrysene	ND	U	4.0	0.56	1	09/22/06	09/23/06	JWG0602976	
Benz(a)anthracene	ND	U	4.0	0.58	1	09/22/06	09/23/06	JWG0602976	
Benzo(b)fluoranthene	ND	U	4.0	0.93	1	09/22/06	09/23/06	JWG0602976	
Benzo(k)fluoranthene	ND	U	4.0	0.76	1	09/22/06	09/23/06	JWG0602976	
Benzo(a)pyrene	ND	U	4.0	1.3	1	09/22/06	09/23/06	JWG0602976	
Indeno(1,2,3-cd)pyrene	ND	U	4.0	1.1	1	09/22/06	09/23/06	JWG0602976	
Dibenz(a,h)anthracene	ND	U	4.0	0.59	1	09/22/06	09/23/06	JWG0602976	
Benzo(g,h,i)perylene	ND	U	4.0	0.76	1	09/22/06	09/23/06	JWG0602976	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorobiphenyl	66	30-118	09/23/06	Acceptable
2,4,6-Tribromophenol	87	34-166	09/23/06	Acceptable
p-Terphenyl-d14	74	41-146	09/23/06	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Premier Environmental Services	**Service Request:**	J0604558
Project:	IP Wiggins/202008.01	**Date Collected:**	09/21/2006
Sample Matrix:	Soil	**Date Received:**	09/22/2006

Semi-Volatile Organic Compounds by GC/MS

Sample Name:	10W	**Units:**	ug/Kg
Lab Code:	J0604558-003	**Basis:**	Dry
Extraction Method:	EPA 3550	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	ND	U	4.0	0.59	1	09/22/06	09/23/06	JWG0602976	
2-Methylnaphthalene	ND	U	4.0	1.8	1	09/22/06	09/23/06	JWG0602976	
1-Methylnaphthalene	ND	U	4.0	1.3	1	09/22/06	09/23/06	JWG0602976	
Acenaphthylene	ND	U	7.9	3.0	1	09/22/06	09/23/06	JWG0602976	
Acenaphthene	ND	U	7.9	3.1	1	09/22/06	09/23/06	JWG0602976	
Fluorene	ND	U	4.0	1.8	1	09/22/06	09/23/06	JWG0602976	
Pentachlorophenol	**3.3**	J	40	0.81	1	09/22/06	09/23/06	JWG0602976	
Phenanthrene	ND	U	7.9	3.8	1	09/22/06	09/23/06	JWG0602976	
Anthracene	ND	U	4.0	0.71	1	09/22/06	09/23/06	JWG0602976	
Fluoranthene	ND	U	4.0	0.68	1	09/22/06	09/23/06	JWG0602976	
Pyrene	ND	U	4.0	0.60	1	09/22/06	09/23/06	JWG0602976	
Chrysene	ND	U	4.0	0.56	1	09/22/06	09/23/06	JWG0602976	
nz(a)anthracene	ND	U	4.0	0.58	1	09/22/06	09/23/06	JWG0602976	
enzo(b)fluoranthene	ND	U	4.0	0.92	1	09/22/06	09/23/06	JWG0602976	
Benzo(k)fluoranthene	ND	U	4.0	0.75	1	09/22/06	09/23/06	JWG0602976	
Benzo(a)pyrene	ND	U	4.0	1.3	1	09/22/06	09/23/06	JWG0602976	
Indeno(1,2,3-cd)pyrene	ND	U	4.0	1.0	1	09/22/06	09/23/06	JWG0602976	
Dibenz(a,h)anthracene	ND	U	4.0	0.59	1	09/22/06	09/23/06	JWG0602976	
Benzo(g,h,i)perylene	ND	U	4.0	0.75	1	09/22/06	09/23/06	JWG0602976	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorobiphenyl	57	30-118	09/23/06	Acceptable
2,4,6-Tribromophenol	73	34-166	09/23/06	Acceptable
p-Terphenyl-d14	71	41-146	09/23/06	Acceptable

Comments:

Client: Premier Environmental Services
Project: IP Wiggins/202008.01
Sample Matrix: Soil

Service Request: J0604558
Date Collected: 09/21/2006
Date Received: 09/22/2006

Semi-Volatile Organic Compounds by GC/MS

Sample Name: 11W
Lab Code: J0604558-004

Extraction Method: EPA 3550
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Dry

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	ND	U	3.9	0.59	1	09/22/06	09/23/06	JWG0602976	
2-Methylnaphthalene	ND	U	3.9	1.8	1	09/22/06	09/23/06	JWG0602976	
1-Methylnaphthalene	ND	U	3.9	1.3	1	09/22/06	09/23/06	JWG0602976	
Acenaphthylene	ND	U	7.8	3.0	1	09/22/06	09/23/06	JWG0602976	
Acenaphthene	ND	U	7.8	3.1	1	09/22/06	09/23/06	JWG0602976	
Fluorene	ND	U	3.9	1.8	1	09/22/06	09/23/06	JWG0602976	
Pentachlorophenol	**12**	J	39	0.80	1	09/22/06	09/23/06	JWG0602976	
Phenanthrene	ND	U	7.8	3.8	1	09/22/06	09/23/06	JWG0602976	
Anthracene	ND	U	3.9	0.70	1	09/22/06	09/23/06	JWG0602976	
Fluoranthene	ND	U	3.9	0.68	1	09/22/06	09/23/06	JWG0602976	
Pyrene	ND	U	3.9	0.60	1	09/22/06	09/23/06	JWG0602976	
Chrysene	ND	U	3.9	0.55	1	09/22/06	09/23/06	JWG0602976	
Benz(a)anthracene	ND	U	3.9	0.58	1	09/22/06	09/23/06	JWG0602976	
Benzo(b)fluoranthene	ND	U	3.9	0.92	1	09/22/06	09/23/06	JWG0602976	
Benzo(k)fluoranthene	ND	U	3.9	0.75	1	09/22/06	09/23/06	JWG0602976	
Benzo(a)pyrene	ND	U	3.9	1.3	1	09/22/06	09/23/06	JWG0602976	
Indeno(1,2,3-cd)pyrene	ND	U	3.9	1.0	1	09/22/06	09/23/06	JWG0602976	
Dibenz(a,h)anthracene	ND	U	3.9	0.59	1	09/22/06	09/23/06	JWG0602976	
Benzo(g,h,i)perylene	ND	U	3.9	0.75	1	09/22/06	09/23/06	JWG0602976	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorobiphenyl	62	30-118	09/23/06	Acceptable
2,4,6-Tribromophenol	75	34-166	09/23/06	Acceptable
p-Terphenyl-d14	70	41-146	09/23/06	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Premier Environmental Services	**Service Request:**	J0604558
Project:	IP Wiggins/202008.01	**Date Collected:**	NA
Sample Matrix:	Soil	**Date Received:**	NA

Semi-Volatile Organic Compounds by GC/MS

Sample Name:	Method Blank	**Units:**	ug/Kg
Lab Code:	JWG0602976-4	**Basis:**	Dry
Extraction Method:	EPA 3550	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	ND	U	3.4	0.51	1	09/22/06	09/23/06	JWG0602976	
2-Methylnaphthalene	ND	U	3.4	1.5	1	09/22/06	09/23/06	JWG0602976	
1-Methylnaphthalene	ND	U	3.4	1.1	1	09/22/06	09/23/06	JWG0602976	
Acenaphthylene	ND	U	6.8	2.6	1	09/22/06	09/23/06	JWG0602976	
Acenaphthene	ND	U	6.8	2.7	1	09/22/06	09/23/06	JWG0602976	
Fluorene	ND	U	3.4	1.5	1	09/22/06	09/23/06	JWG0602976	
Pentachlorophenol	ND	U	34	0.70	1	09/22/06	09/23/06	JWG0602976	
Phenanthrene	ND	U	6.8	3.3	1	09/22/06	09/23/06	JWG0602976	
Anthracene	ND	U	3.4	0.61	1	09/22/06	09/23/06	JWG0602976	
Fluoranthene	ND	U	3.4	0.59	1	09/22/06	09/23/06	JWG0602976	
Pyrene	ND	U	3.4	0.52	1	09/22/06	09/23/06	JWG0602976	
Chrysene	ND	U	3.4	0.48	1	09/22/06	09/23/06	JWG0602976	
Benz(a)anthracene	ND	U	3.4	0.50	1	09/22/06	09/23/06	JWG0602976	
Benzo(b)fluoranthene	ND	U	3.4	0.80	1	09/22/06	09/23/06	JWG0602976	
Benzo(k)fluoranthene	ND	U	3.4	0.65	1	09/22/06	09/23/06	JWG0602976	
Benzo(a)pyrene	ND	U	3.4	1.1	1	09/22/06	09/23/06	JWG0602976	
Indeno(1,2,3-cd)pyrene	ND	U	3.4	0.87	1	09/22/06	09/23/06	JWG0602976	
Dibenz(a,h)anthracene	ND	U	3.4	0.51	1	09/22/06	09/23/06	JWG0602976	
Benzo(g,h,i)perylene	ND	U	3.4	0.65	1	09/22/06	09/23/06	JWG0602976	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorobiphenyl	60	30-118	09/23/06	Acceptable
2,4,6-Tribromophenol	74	34-166	09/23/06	Acceptable
p-Terphenyl-d14	73	41-146	09/23/06	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client : Premier Environmental Services
Project Name : IP Wiggins
Project Number : 202008.01
Sample Matrix : SOIL

Service Request : J0604558
Date Collected : 09/21/06
Date Received : 09/22/06

Solids, Total

Units : PERCENT
Analysis Method : 160.3 MOD
Basis : NA
Test Notes :

Sample Name	Lab Code	MRL	MDL	Dilution Factor	Date/Time Analyzed	Result	Result Notes
8W	J0604558-001	0.1	0.1	1	09/22/06 18:00	86	
9F	J0604558-002	0.1	0.1	1	09/22/06 18:00	87	
10W	J0604558-003	0.1	0.1	1	09/22/06 18:00	87	
11W	J0604558-004	0.1	0.1	1	09/22/06 18:00	88	

Report By:Palimi

Client: Premier Environmental Services
Project: IP Wiggins/202008.01
Sample Matrix: Soil

Service Request: J0604558

Surrogate Recovery Summary
Semi-Volatile Organic Compounds by GC/MS

Extraction Method: EPA 3550
Analysis Method: 8270C SIM

Units: PERCENT
Level: Low

Sample Name	Lab Code	Sur1	Sur2	Sur3
8W	J0604558-001	61	77	73
9F	J0604558-002	66	87	74
10W	J0604558-003	57	73	71
11W	J0604558-004	62	75	70
Method Blank	JWG0602976-4	60	74	73
8WMS	JWG0602976-1	72	89	78
8WDMS	JWG0602976-2	74	89	78
Lab Control Sample	JWG0602976-3	72	85	77

Surrogate Recovery Control Limits (%)

Sur1 =	2-Fluorobiphenyl	30-118
Sur2 =	2,4,6-Tribromophenol	34-166
Sur3 =	p-Terphenyl-d14	41-146

Results flagged with an asterisk (*) indicate values outside control criteria.
Results flagged with a pound (#) indicate the control criteria is not applicable.

Client:	Premier Environmental Services	**Service Request:**	J0604558
Project:	IP Wiggins/202008.01	**Date Extracted:**	09/22/2006
Sample Matrix:	Soil	**Date Analyzed:**	09/23/2006

Matrix Spike/Duplicate Matrix Spike Summary
Semi-Volatile Organic Compounds by GC/MS

Sample Name:	8W	**Units:**	ug/Kg
Lab Code:	J0604558-001	**Basis:**	Dry
Extraction Method:	EPA 3550	**Level:**	Low
Analysis Method:	8270C SIM	**Extraction Lot:**	JWG0602976

Analyte Name	Sample Result	8WMS JWG0602976-1 Matrix Spike			8WDMS JWG0602976-2 Duplicate Matrix Spike			%Rec Limits	RPD	RPD Limit
		Result	Expected	%Rec	Result	Expected	%Rec			
Naphthalene	ND	125	193	65	128	193	67	41-106	3	30
2-Methylnaphthalene	ND	140	193	72	142	193	73	45-111	1	30
1-Methylnaphthalene	ND	128	193	66	130	193	67	37-116	2	30
Acenaphthylene	ND	133	193	69	134	193	70	37-130	1	30
Acenaphthene	ND	138	193	71	141	193	73	27-123	3	30
Fluorene	ND	142	193	74	144	193	75	37-128	1	30
Pentachlorophenol	ND	202	193	105	204	193	106	50-150	1	30
Phenanthrene	ND	142	193	74	142	193	74	13-148	0	30
Anthracene	ND	120	193	62	116	193	60	13-148	4	30
oranthene	ND	145	193	75	145	193	75	39-138	0	30
yrene	ND	144	193	75	145	193	75	28-158	0	30
Chrysene	ND	144	193	74	144	193	75	27-135	0	30
Benz(a)anthracene	ND	153	193	80	154	193	80	12-159	0	30
Benzo(b)fluoranthene	ND	180	193	93	183	193	95	18-150	2	30
Benzo(k)fluoranthene	ND	149	193	77	152	193	79	10-177	1	30
Benzo(a)pyrene	ND	139	193	72	135	193	70	22-138	3	30
Indeno(1,2,3-cd)pyrene	ND	141	193	73	138	193	72	20-144	2	30
Dibenz(a,h)anthracene	ND	139	193	72	141	193	73	34-126	2	30
Benzo(g,h,i)perylene	ND	130	193	67	128	193	66	10-174	1	30

ılts flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: Premier Environmental Services
Project: IP Wiggins/202008.01
Sample Matrix: Soil

Service Request: J0604558
Date Extracted: 09/22/2006
Date Analyzed: 09/23/2006

Lab Control Spike Summary
Semi-Volatile Organic Compounds by GC/MS

Extraction Method: EPA 3550
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Dry
Level: Low
Extraction Lot: JWG0602976

Analyte Name	Lab Control Sample JWG0602976-3 Lab Control Spike Result	Expected	%Rec	%Rec Limits
Naphthalene	112	167	67	30-112
2-Methylnaphthalene	121	167	73	30-118
1-Methylnaphthalene	111	167	67	32-114
Acenaphthylene	112	167	67	27-124
Acenaphthene	118	167	71	26-119
Fluorene	122	167	73	30-125
Pentachlorophenol	164	167	98	16-140
Phenanthrene	120	167	72	32-119
Anthracene	97.3	167	58	31-105
Fluoranthene	124	167	74	35-131
Pyrene	122	167	73	30-136
Chrysene	122	167	73	44-120
Benz(a)anthracene	129	167	77	40-125
Benzo(b)fluoranthene	157	167	94	43-130
Benzo(k)fluoranthene	136	167	82	47-123
Benzo(a)pyrene	116	167	69	29-104
Indeno(1,2,3-cd)pyrene	128	167	77	40-124
Dibenz(a,h)anthracene	131	167	78	45-125
Benzo(g,h,i)perylene	121	167	72	42-121

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : Premier Environmental Services
Project Name : IP Wiggins
Project Number : 202008.01
Sample Matrix : SOIL

Service Request : J0604558
Date Collected : 09/21/06
Date Received : 09/22/06
Date Extracted : NA
Date Analyzed : 09/22/06

Duplicate Summary
Inorganic Parameters

Sample Name : 8W
Lab Code : J0604558-001DUP
Test Notes :

Units : PERCENT
Basis : NA

Analyte	Analysis Method	MRL	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
Solids, Total	160.3 MOD	0.1	86	86	86	<1	

Report By:Palimi

Columbia Analytical Services, Inc.
Cooler Receipt and Preservation Form

58 ND

Client: Premier Env. Service Request # J0604588

Project: IP Wiggins

Cooler received on 9/22/06 and opened on 9/22/06 by SL

COURIER: CAS UPS (FEDEX) DHL CLIENT Tracking # 8592 3269 6020

1	Were custody seals on outside of cooler?	(Yes)	No	N/A
2	Were seals intact, signed and dated?	(Yes)	No	N/A
3	Were custody papers properly filled out?	(Yes)	No	N/A
4	Temperature of cooler(s) upon receipt (Should be 4 +/- 2 degrees C) 5.2			
5	Correct Temperature?	(Yes)	No	N/A
6	Were Ice or Ice Packs present	(Yes)	No	N/A
7	Did all bottles arrive in good condition (unbroken, etc....)?	(Yes)	No	N/A
8	Were all bottle labels complete (sample ID, preservation, etc....)?	(Yes)	No	N/A
9	Did all bottle labels and tags agree with custody papers?	(Yes)	No	N/A
10	Were the correct bottles used for the tests indicated?	(Yes)	No	N/A
11	Were all of the preserved bottles received with the appropriate preservative?	Yes	No	(N/A)

HNO3 pH<2 H2SO4 pH<2 ZnAc2/NaOH pH>9 NaOH pH>12 HCl pH<2

Preservative additions noted below

12	Were all samples received within analysis holding times?	(Yes)	No	N/A
13	Were VOA vials checked for absence of air bubbles? If present, note below	Yes	No	(N/A)
14	Where did the bottles originate?	(CAS)	Client	

Sample ID	Reagent	Manuf. Lot # or CAS Chem ID	ml added	Inititials

Additional comments and/or explanation of all discrepancies noted above:

Client approval to run samples if discrepancies noted: Date

SR # : J 0604588 58 ND   Date: 9/22/06   Initials: SL

Note that pH is checked and meets the required pH criterion listed in the column heading unless otherwise noted on cooler receipt form.

	Bottle Code																													
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Container	40mL	40mL	40mL	40mL	125mL	125mL	125mL	125mL	250mL	250mL	250mL	250mL	250mL	250mL	250mL	500mL	500mL	500mL	1L	1L	1L	1L	1L	2oz	4oz	8oz	16oz	5g	100mL	Misc.
	G	G	G	G	P	P	P	P	P	P	P	P	P	G	G	P	P	P	P	P	G	G	G	G	G	G	G	ENC	P	Misc.
Pres.		HCl	Sodium Thiosulfate	H2SO4		HCl	H2SO4	HNO3		H2SO4	HNO3	ZnAcetate NaOH	NaOH		HNO3		H2SO4	HNO3		HNO3		HCl	H2SO4						Sodium Thiosulfate	
Req. pH	N/A	<2	N/A	<2	N/A	<2	<2	<2	N/A	<2	<2	>9	>12	N/A	<2	N/A	<2	<2	N/A	<2	N/A	<2	<2	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sample #	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-				-	-
-001																										/				
-002																										/				
-003																										/				
-004																										/				
-005																														
-006																														
-007																														
-008																														
-009																														
-010																														
-011																														
-012																														
-013																														
-014																														
-015																														
-016																														
-017																														
-018																														
-019																														
-020																														
-021																														
-022																														
-023																														
-024																														
-025																														
-026																														
-027																														
-028																														
-029																														
-030																														
-031																														
-032																														
-033																														
-034																														
-035																														
-036																														
-037																														
-038																														
-039																														
-040																														

Columbia Analytical Services INC.
An Employee - Owned Company
www.caslab.com

CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

8540 Baycenter Rd. • Jacksonville, FL 32256 • (904) 739-2277 • 800-695-7222 x06 • FAX (904) 739-2011

[redacted]

Project Name: LP Wissins	Project Number: 202008.01
Project Manager: Doug Seely	Email Address: dseely@premiercorp-usa.com
Company/Address: 1880 West Oak Pkwy Bldg. 100 Ste 106 Marietta, GA 30062	
Phone #: 770-973-2100	FAX#: 770-973-7395
Sampler's Signature:	Sampler's Printed Name: Josh Tidwell

ANALYSIS REQUESTED (Include Method Number and Container Preservative)

PRESERVATIVE: 0

CLIENT SAMPLE ID	LAB ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NUMBER OF CONTAINERS	PAH + PCP
8W		9/21/06	1355	S	1	X
9F		1	1405	1	1	X
10W		1	1415	1	1	X
11W		9/21/06	1428	S	1	X

Preservative Key
0. NONE
1. HCL
2. HNO_3
3. H_2SO_4
4. NaOH
5. Zn. Acetate
6. MeOH
7. $NaHSO_4$
8. Other _____

REMARKS/ ALTERNATE DESCRIPTION

SPECIAL INSTRUCTIONS/COMMENTS

Rush Analysis!

See QAPP ☐

TURNAROUND REQUIREMENTS
X RUSH (SURCHARGES APPLY)
_____ STANDARD
REQUESTED FAX DATE
_____
REQUESTED REPORT DATE
_____

REPORT REQUIREMENTS
____ I. Results Only
____ II. Results + QC Summaries (LCS, DUP, MS/MSD as required)
____ III. Results + QC and Calibration Summaries
____ IV. Data Validation Report with Raw Data
____ V. Speicalized Forms / Custom Report
Edata ____ Yes ____ No

INVOICE INFORMATION
PO#
BILL TO:

SAMPLE RECEIPT: CONDITION/COOLER TEMP: _____ CUSTODY SEALS: Y N

RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY
Signature:	Signature: Shawn Lightsey	Signature:	Signature:	Signature:	Signature:
Printed Name: Josh Tidwell	Printed Name: Shawn Lightsey	Printed Name:	Printed Name:	Printed Name:	Printed Name:
Firm: Premier Env.	Firm: CAS	Firm:	Firm:	Firm:	Firm:
Date/Time: 9/21/06 6:00PM	Date/Time: 9/22/06 0805	Date/Time:	Date/Time:	Date/Time:	Date/Time:

Distribution: White - Return to Originator; Yellow - Lab Copy; Pink - Retained by Client

COLUMBIA ANALYTICAL SERVICES, INC.

Client:	Premier Environmental Services	**Service Request No.:**	J0604596
Project:	Wiggins Site	**Date Received:**	9/26/06
Sample Matrix:	soil		

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of Columbia Analytical Services, Inc. (CAS). This report contains analytical results for samples designated for Tier II data deliverables, including results of QC samples analyzed from this delivery group. When appropriate to the procedure, method blank results have been reported with each analytical test. Analytical procedures performed by the lab are validated in accordance with NELAC standards. Parameters that are included in the NELAC Fields of Testing but are not included in the lab's NELAC accreditation are identified in the discussion of each analytical procedure.

Sample Receipt

1 soil sample was received for analysis at Columbia Analytical Services on 9/26/06. The samples were received in good condition and consistent with the accompanying chain of custody form. Samples are refrigerated at 4±2°C upon receipt at the lab.

PAHs and PCP by GC-MS SIM

No problems were observed with this delivery group.

Approved by Tom D. Hissing **Date** 9/27/06

Data Qualifiers

Inorganic Data

*	The result is an outlier. See case narrative.
#	The control limit criteria are not applicable. See case narrative.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result.
E	The result is an estimated amount because the value exceeded the instrument calibration range.
J	The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
U	The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
Z	Too many colonies were present (TNTC). The numeric value represents the filtration volume.
i	The MRL/MDL has been elevated due to matrix interference.
X	See case narrative.

Metals Data

*	The result is an outlier. See case narrative.
#	The control limit criteria are not applicable. See case narrative.
B	The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
E	The reported value is estimated because of the presence of matrix interference.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The result was determined by Method of Standard Additions (MSA).
U	The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL has been elevated due to matrix interference.
X	See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.

Organic Data

*	The result is an outlier. See case narrative.
#	The control limit criteria are not applicable. See case narrative.
A	The tentatively identified compound is a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result.
C	The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
D	The reported result is from a dilution.
E	The result is an estimated amount because the value exceeded the instrument calibration range.
J	The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
P	The GC or HPLC confirmation criteria were exceeded. The relative percent difference is greater than 40% between the two analytical results (25% for CLP Pesticides)
U	The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
i	The MRL/MDL has been elevated due to a chromatographic interference.
X	See case narrative.

Petroleum Hydrocarbon Specific

F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
Y	The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
Z	The chromatographic fingerprint does not resemble a petroleum product.

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
J0604596-001	12F	09/25/06	00:00

Client: Premier Environmental Services
Project: Wiggins Site
Sample Matrix: Soil

Service Request: J0604596
Date Collected: 09/25/2006
Date Received: 09/26/2006

Semi-Volatile Organic Compounds by GC/MS

Sample Name: 12F
Lab Code: J0604596-001

Extraction Method: EPA 3550
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Dry

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	ND	U	4.0	0.60	1	09/26/06	09/26/06	JWG0603002	
2-Methylnaphthalene	ND	U	4.0	1.8	1	09/26/06	09/26/06	JWG0603002	
1-Methylnaphthalene	ND	U	4.0	1.3	1	09/26/06	09/26/06	JWG0603002	
Acenaphthylene	ND	U	8.0	3.1	1	09/26/06	09/26/06	JWG0603002	
Acenaphthene	ND	U	8.0	3.2	1	09/26/06	09/26/06	JWG0603002	
Fluorene	ND	U	4.0	1.8	1	09/26/06	09/26/06	JWG0603002	
Pentachlorophenol	**2.5**	J	40	0.82	1	09/26/06	09/26/06	JWG0603002	
Phenanthrene	ND	U	8.0	3.9	1	09/26/06	09/26/06	JWG0603002	
Anthracene	ND	U	4.0	0.72	1	09/26/06	09/26/06	JWG0603002	
Fluoranthene	ND	U	4.0	0.69	1	09/26/06	09/26/06	JWG0603002	
Pyrene	ND	U	4.0	0.61	1	09/26/06	09/26/06	JWG0603002	
Chrysene	ND	U	4.0	0.56	1	09/26/06	09/26/06	JWG0603002	
Benz(a)anthracene	ND	U	4.0	0.59	1	09/26/06	09/26/06	JWG0603002	
Benzo(b)fluoranthene	ND	U	4.0	0.94	1	09/26/06	09/26/06	JWG0603002	
Benzo(k)fluoranthene	ND	U	4.0	0.76	1	09/26/06	09/26/06	JWG0603002	
Benzo(a)pyrene	ND	U	4.0	1.3	1	09/26/06	09/26/06	JWG0603002	
Indeno(1,2,3-cd)pyrene	ND	U	4.0	1.1	1	09/26/06	09/26/06	JWG0603002	
Dibenz(a,h)anthracene	ND	U	4.0	0.60	1	09/26/06	09/26/06	JWG0603002	
Benzo(g,h,i)perylene	ND	U	4.0	0.76	1	09/26/06	09/26/06	JWG0603002	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorobiphenyl	55	30-118	09/26/06	Acceptable
2,4,6-Tribromophenol	71	34-166	09/26/06	Acceptable
p-Terphenyl-d14	66	41-146	09/26/06	Acceptable

Comments:

Client: Premier Environmental Services
Project: Wiggins Site
Sample Matrix: Soil

Service Request: J0604596
Date Collected: NA
Date Received: NA

Semi-Volatile Organic Compounds by GC/MS

Sample Name: Method Blank
Lab Code: JWG0603002-4

Extraction Method: EPA 3550
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Dry

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	ND	U	3.4	0.51	1	09/26/06	09/26/06	JWG0603002	
2-Methylnaphthalene	ND	U	3.4	1.5	1	09/26/06	09/26/06	JWG0603002	
1-Methylnaphthalene	ND	U	3.4	1.1	1	09/26/06	09/26/06	JWG0603002	
Acenaphthylene	ND	U	6.8	2.6	1	09/26/06	09/26/06	JWG0603002	
Acenaphthene	ND	U	6.8	2.7	1	09/26/06	09/26/06	JWG0603002	
Fluorene	ND	U	3.4	1.5	1	09/26/06	09/26/06	JWG0603002	
Pentachlorophenol	ND	U	34	0.70	1	09/26/06	09/26/06	JWG0603002	
Phenanthrene	ND	U	6.8	3.3	1	09/26/06	09/26/06	JWG0603002	
Anthracene	ND	U	3.4	0.61	1	09/26/06	09/26/06	JWG0603002	
Fluoranthene	ND	U	3.4	0.59	1	09/26/06	09/26/06	JWG0603002	
Pyrene	ND	U	3.4	0.52	1	09/26/06	09/26/06	JWG0603002	
Chrysene	ND	U	3.4	0.48	1	09/26/06	09/26/06	JWG0603002	
Benz(a)anthracene	ND	U	3.4	0.50	1	09/26/06	09/26/06	JWG0603002	
Benzo(b)fluoranthene	ND	U	3.4	0.80	1	09/26/06	09/26/06	JWG0603002	
Benzo(k)fluoranthene	ND	U	3.4	0.65	1	09/26/06	09/26/06	JWG0603002	
Benzo(a)pyrene	ND	U	3.4	1.1	1	09/26/06	09/26/06	JWG0603002	
Indeno(1,2,3-cd)pyrene	ND	U	3.4	0.87	1	09/26/06	09/26/06	JWG0603002	
Dibenz(a,h)anthracene	ND	U	3.4	0.51	1	09/26/06	09/26/06	JWG0603002	
Benzo(g,h,i)perylene	ND	U	3.4	0.65	1	09/26/06	09/26/06	JWG0603002	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorobiphenyl	57	30-118	09/26/06	Acceptable
2,4,6-Tribromophenol	73	34-166	09/26/06	Acceptable
p-Terphenyl-d14	68	41-146	09/26/06	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client : Premier Environmental Services
Project Name : Wiggins Site
Project Number : NA
Sample Matrix : SOIL

Service Request : J0604596
Date Collected : 09/25/06
Date Received : 09/26/06

Solids, Total

Units : PERCENT
Analysis Method : 160.3 MOD
Basis : NA
Test Notes :

Sample Name	Lab Code	MRL	MDL	Dilution Factor	Date/Time Analyzed	Result	Result Notes
12F	J0604596-001	0.1	0.1	1	09/26/06 17:55	86	

Report By:Palimi

Client: Premier Environmental Services
Project: Wiggins Site
Sample Matrix: Soil

Service Request: J0604596

Surrogate Recovery Summary
Semi-Volatile Organic Compounds by GC/MS

Extraction Method: EPA 3550
Analysis Method: 8270C SIM

Units: PERCENT
Level: Low

Sample Name	Lab Code	Sur1	Sur2	Sur3
12F	J0604596-001	55	71	66
Method Blank	JWG0603002-4	57	73	68
12FMS	JWG0603002-1	63	81	70
12FDMS	JWG0603002-2	67	87	73
Lab Control Sample	JWG0603002-3	66	83	71

Surrogate Recovery Control Limits (%)

Sur1 =	2-Fluorobiphenyl	30-118
Sur2 =	2,4,6-Tribromophenol	34-166
Sur3 =	p-Terphenyl-d14	41-146

Results flagged with an asterisk (*) indicate values outside control criteria.
Results flagged with a pound (#) indicate the control criteria is not applicable.

Client: Premier Environmental Services
Project: Wiggins Site
Sample Matrix: Soil

Service Request: J0604596
Date Extracted: 09/26/2006
Date Analyzed: 09/26/2006

Matrix Spike/Duplicate Matrix Spike Summary
Semi-Volatile Organic Compounds by GC/MS

Sample Name: 12F
Lab Code: J0604596-001

Units: ug/Kg
Basis: Dry

Extraction Method: EPA 3550
Analysis Method: 8270C SIM

Level: Low
Extraction Lot: JWG0603002

Analyte Name	Sample Result	12FMS JWG0603002-1 Matrix Spike			12FDMS JWG0603002-2 Duplicate Matrix Spike			%Rec Limits	RPD	RPD Limit
		Result	Expected	%Rec	Result	Expected	%Rec			
Naphthalene	ND	108	194	56	111	194	57	41-106	3	30
2-Methylnaphthalene	ND	122	194	63	128	194	66	45-111	5	30
1-Methylnaphthalene	ND	111	194	57	117	194	61	37-116	5	30
Acenaphthylene	ND	115	194	60	120	194	62	37-130	3	30
Acenaphthene	ND	120	194	62	125	194	65	27-123	4	30
Fluorene	ND	125	194	64	129	194	67	37-128	3	30
Pentachlorophenol	2.5	199	194	101	208	194	106	50-150	4	30
Phenanthrene	ND	126	194	65	130	194	67	13-148	3	30
Anthracene	ND	106	194	55	109	194	56	13-148	3	30
Fluoranthene	ND	129	194	67	134	194	69	39-138	3	30
Pyrene	ND	125	194	64	130	194	67	28-158	4	30
Chrysene	ND	126	194	65	130	194	67	27-135	3	30
Benz(a)anthracene	ND	137	194	71	139	194	72	12-159	1	30
Benzo(b)fluoranthene	ND	159	194	82	164	194	85	18-150	3	30
Benzo(k)fluoranthene	ND	141	194	73	138	194	71	10-177	2	30
Benzo(a)pyrene	ND	126	194	65	125	194	64	22-138	1	30
Indeno(1,2,3-cd)pyrene	ND	108	194	56	110	194	57	20-144	2	30
Dibenz(a,h)anthracene	ND	107	194	55	110	194	57	34-126	3	30
Benzo(g,h,i)perylene	ND	98.2	194	51	101	194	52	10-174	3	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: Premier Environmental Services
Project: Wiggins Site
Sample Matrix: Soil

Service Request: J0604596
Date Extracted: 09/26/2006
Date Analyzed: 09/26/2006

Lab Control Spike Summary
Semi-Volatile Organic Compounds by GC/MS

Extraction Method: EPA 3550
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Dry
Level: Low
Extraction Lot: JWG0603002

Analyte Name	Lab Control Sample JWG0603002-3 Lab Control Spike Result	Expected	%Rec	%Rec Limits
Naphthalene	101	167	61	30-112
2-Methylnaphthalene	112	167	67	30-118
1-Methylnaphthalene	102	167	61	32-114
Acenaphthylene	101	167	61	27-124
Acenaphthene	106	167	63	26-119
Fluorene	109	167	65	30-125
Pentachlorophenol	167	167	100	16-140
Phenanthrene	109	167	65	32-119
Anthracene	90.0	167	54	31-105
Fluoranthene	113	167	68	35-131
Pyrene	108	167	65	30-136
Chrysene	110	167	66	44-120
Benz(a)anthracene	114	167	68	40-125
Benzo(b)fluoranthene	137	167	82	43-130
Benzo(k)fluoranthene	114	167	69	47-123
Benzo(a)pyrene	103	167	62	29-104
Indeno(1,2,3-cd)pyrene	101	167	60	40-124
Dibenz(a,h)anthracene	103	167	62	45-125
Benzo(g,h,i)perylene	92.7	167	56	42-121

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Columbia Analytical Services, Inc.
Cooler Receipt and Preservation Form

Client: Premier Environmental Serv. Service Request # JO604596

Project: IP Wiggins

Cooler received on 9/26/06 and opened on 9/26/06 by SC

COURIER: CAS UPS (FEDEX) DHL CLIENT Tracking # 8592 3297 3553

1	Were custody seals on outside of cooler?	(Yes)	No	N/A
2	Were seals intact, signed and dated?	(Yes)	No	N/A
3	Were custody papers properly filled out?	(Yes)	No	N/A
4	Temperature of cooler(s) upon receipt (Should be 4 +/- 2 degrees C) 2.7			
5	Correct Temperature?	(Yes)	No	N/A
6	Were Ice or Ice Packs present	(Yes)	No	N/A
7	Did all bottles arrive in good condition (unbroken, etc....)?	(Yes)	No	N/A
8	Were all bottle labels complete (sample ID, preservation, etc....)?	(Yes)	No	N/A
9	Did all bottle labels and tags agree with custody papers?	(Yes)	No	N/A
10	Were the correct bottles used for the tests indicated?	(Yes)	No	N/A
11	Were all of the preserved bottles received with the appropriate preservative?	Yes	No	(N/A)
	HNO3 pH<2 H2SO4 pH<2 ZnAc2/NaOH pH>9 NaOH pH>12 HCl pH<2			
	Preservative additions noted below			
12	Were all samples received within analysis holding times?	(Yes)	No	N/A
13	Were VOA vials checked for absence of air bubbles? If present, note below	Yes	No	(N/A)
14	Where did the bottles originate?	(CAS)	Client	

Sample ID	Reagent	Manuf. Lot # or CAS Chem ID	ml added	Inititials

Additional comments and/or explanation of all discrepancies noted above:

Client approval to run samples if discrepancies noted: Date:

SR # : J0604596 Date: 9/26/06 Initials: SK

Note that pH is checked and meets the required pH criterion listed in the column heading unless otherwise noted on cooler receipt form.

	Bottle Code																													
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
	40mL	40mL	40mL	40mL	125mL	125mL	125mL	125mL	250mL	250mL	250mL	250mL	250mL	250mL	250mL	500mL	500mL	500mL	1L	1L	1L	1L	1L	2oz	4oz	8oz	16oz	5g	100mL	Misc.
Container	G	G	G	G	P	P	P	P	P	P	P	P	P	G	G	P	P	P	P	P	G	G	G	G	G	G	G	ENC	P	Misc.
Pres.		HCl	Sodium Thiosulfate	H2SO4		HCl	H2SO4	HNO3		H2SO4	HNO3	ZnAcetate NaOH	NaOH		HNO3		H2SO4	HNO3		HNO3		HCl	H2SO4						Sodium Thiosulfate	
Req. pH	N/A	<2	N/A	<2	N/A	<2	<2	<2	N/A	<2	<2	>9	>12	N/A	<2	N/A	<2	<2	N/A	<2	N/A	<2	<2	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sample #	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-		-	-	-				-	-
-001																										1				
-002																														
-003																														
-004																														
-005																														
-006																														
-007																														
-008																														
-009																														
-010																														
-011																														
-012																														
-013																														
-014																														
-015																														
-016																														
-017																														
-018																														
-019																														
-020																														
-021																														
-022																														
-023																														
-024																														
-025																														
-026																														
-027																														
-028																														
-029																														
-030																														
-031																														
-032																														
-033																														
-034																														
-035																														
-036																														
-037																														
-038																														
-039																														
-040																														

Columbia Analytical Services, INC.
An Employee - Owned Company
www.caslab.com

CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

8540 Baycenter Rd. • Jacksonville, FL 32256 • (904) 739-2277 • 800-695-7222 x06 • FAX (904) 739-2011

PAGE 1 OF 1

SR # J0604596

[redacted]

Project Name: IP Wissins	Project Number: 202008.01
Project Manager: Doug Seely	Email Address: dseely@premiercorp-usa.com
Company Address: 1880 West Oak Pkwy Bldg 100 Ste 106 Marietta GA 30062	
Phone #: 770-973-2100	FAX#: 770-973-7395
Sampler's Signature: [signature]	Sampler's Printed Name: Josh Tidwell

ANALYSIS REQUESTED (Include Method Number and

PRESERVATIVE: 0

CLIENT SAMPLE ID	LAB ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NUMBER OF CONTAINERS	PAH + PCP	REMARKS/ ALTERNATE DESCRIPTION
12F		9/25/06		S	1	X	

Not Used

Preservative Key
0. NONE
1. HCL
2. HNO_3
3. H_2SO_4
4. NaOH
5. Zn. Acetate
6. MeOH
7. $NaHSO_4$
8. Other _____

SPECIAL INSTRUCTIONS/COMMENTS

Rush Analysis!

See QAPP ☐

TURNAROUND REQUIREMENTS
X RUSH (SURCHARGES APPLY)
_____ STANDARD
REQUESTED FAX DATE
_____
REQUESTED REPORT DATE
_____

REPORT REQUIREMENTS
____ I. Results Only
____ II. Results + QC Summaries (LCS, DUP, MS/MSD as required)
____ III. Results + QC and Calibration Summaries
____ IV. Data Validation Report with Raw Data
____ V. Speicalized Forms / Custom Report
Edata ____ Yes ____ No

INVOICE INFORMATION
PO#
BILL TO:

SAMPLE RECEIPT: CONDITION/COOLER TEMP: _____ CUSTODY SEALS: Y N

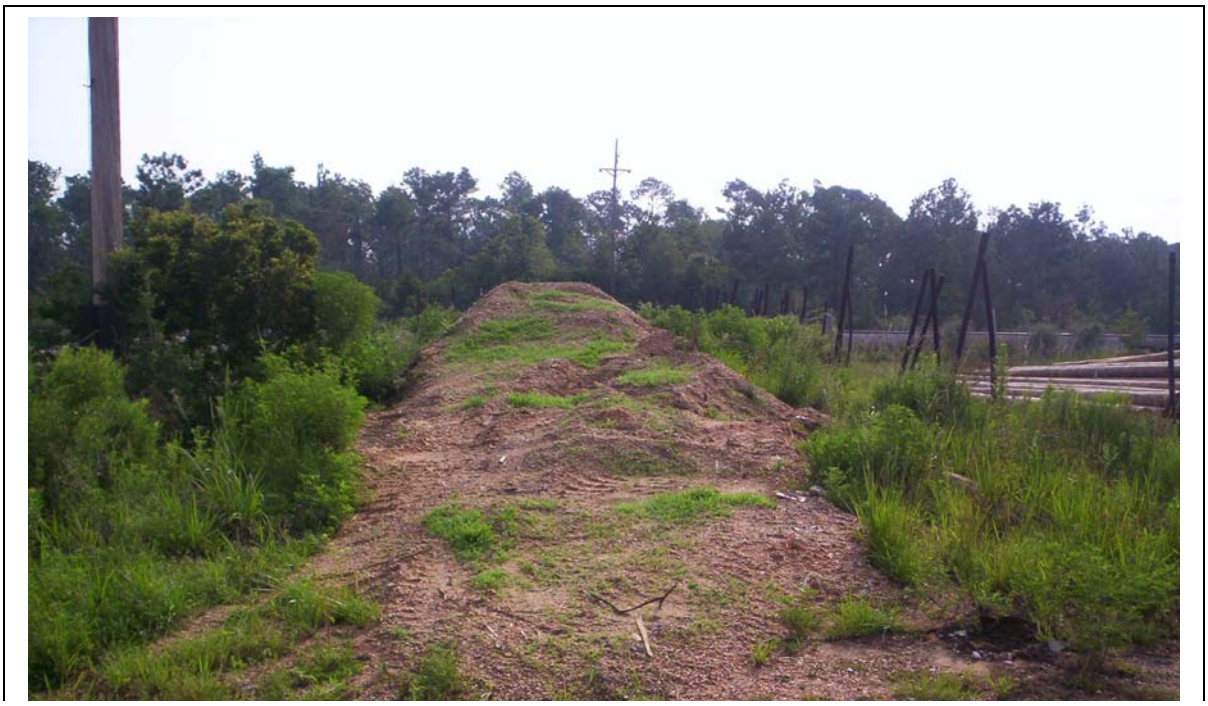
RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY
Signature: [signature]	Signature: Shawn Lightsey	Signature	Signature	Signature	Signature
Printed Name: Josh Tidwell	Printed Name: Shawn Lightsey	Printed Name	Printed Name	Printed Name	Printed Name
Firm: Premier Env.	Firm: CAS	Firm	Firm	Firm	Firm
Date/Time: 9/25/06 6:00PM	Date/Time: 9/26/06 0900	Date/Time	Date/Time	Date/Time	Date/Time

Distribution: White - Return to Originator; Yellow - Lab Copy; Pink - Retained by Client

SCOC-01/12/06-07

Appendix F

Photographs



Picture 1: Waste Soil Pile Prior to Excavation Work

Picture 2: Excavation of Waste Soil Pile

Picture 3: Excavation to Underlying Soil Layer

Picture 4: Loading of Waste Soil into Dump Trailer

Picture 5: Excavated area ready for backfill

Picture 6: Wall Sample Location of Native Underlying Soil

Picture 7: Placement of Backfill into Excavation

Picture 8: Cover & Berm of Excavated Waste Soil

Picture 9: Completed Backfilling of eastern side of Excavation

Picture 10: Completed backfilling of Waste Soil Excavation